

Figure 1

Reaction 1

Aldehyde + X \longrightarrow Compound with first color (Preferably, this is colorless)

Reaction 2 (Preferably, reaction 2 is slower than reaction 1)

Aldehyde + Y \longrightarrow Compound with second color

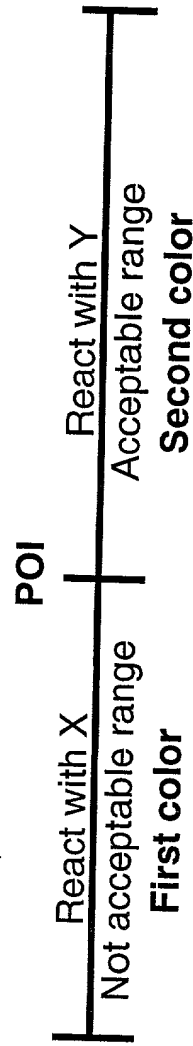
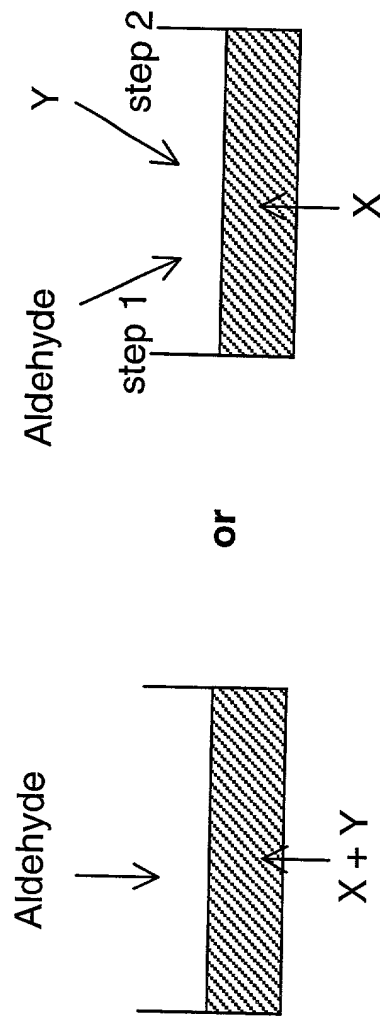


Figure 2

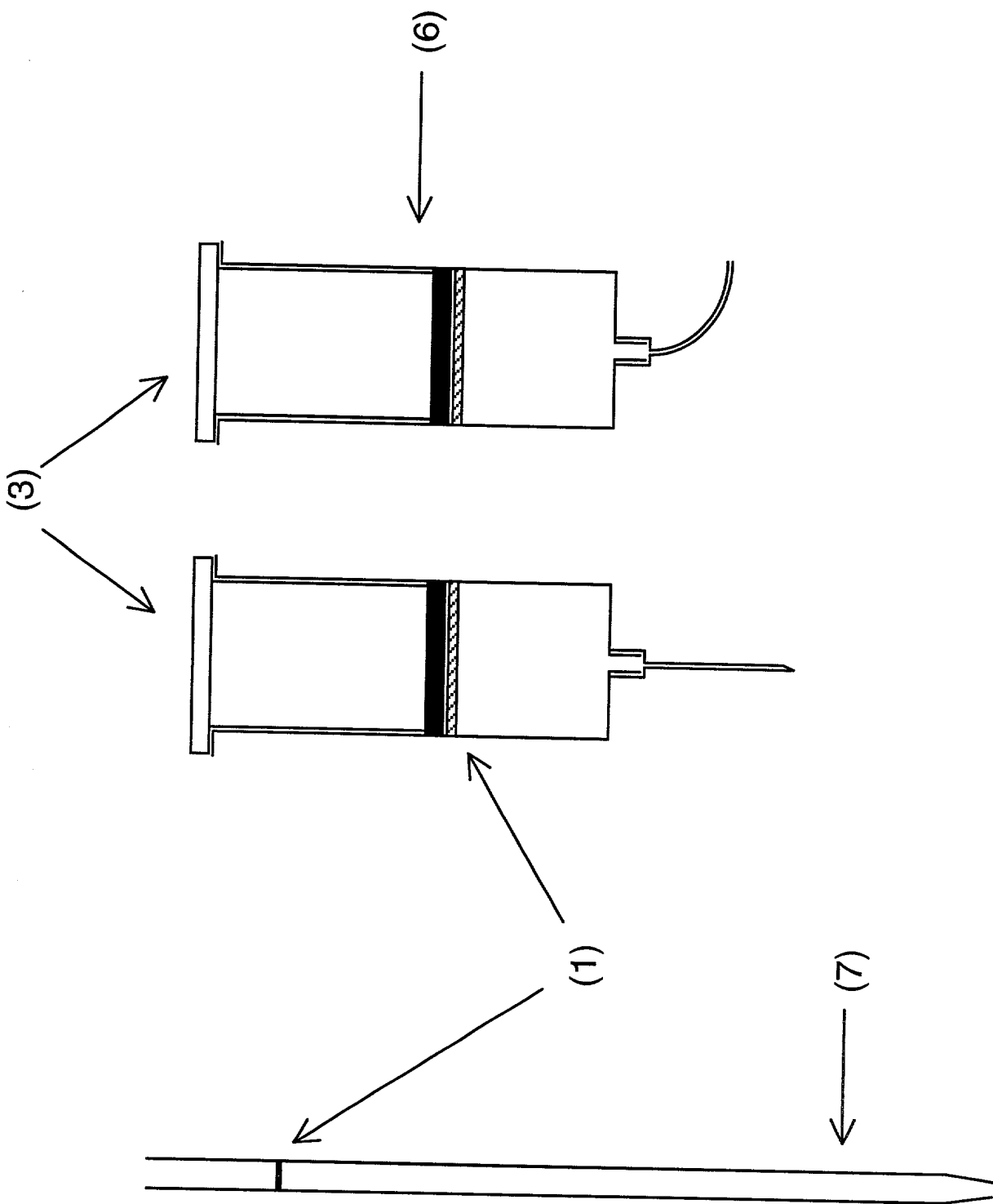
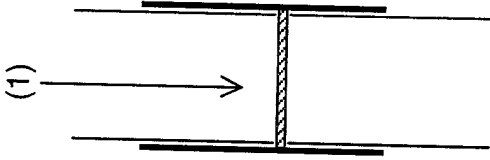
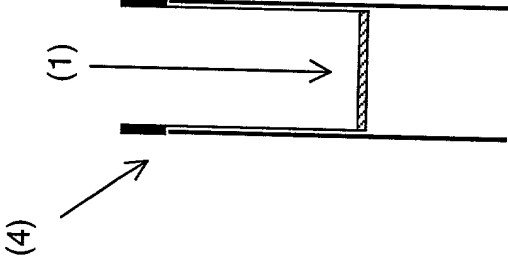


FIG. 3A

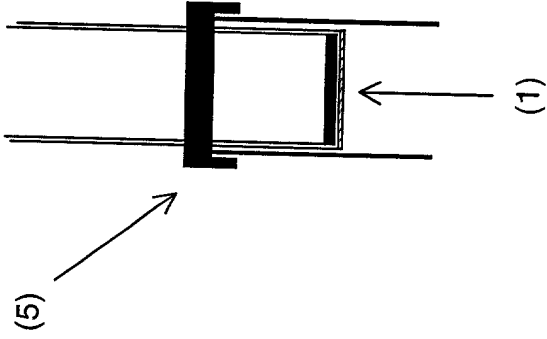
3A



3B



3C



3D

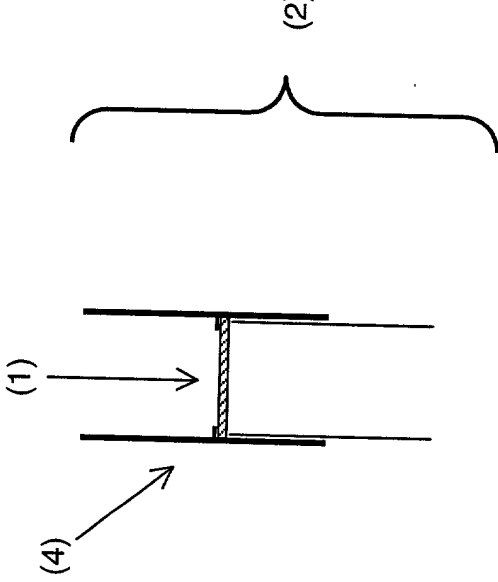


Figure 3

Figure 4

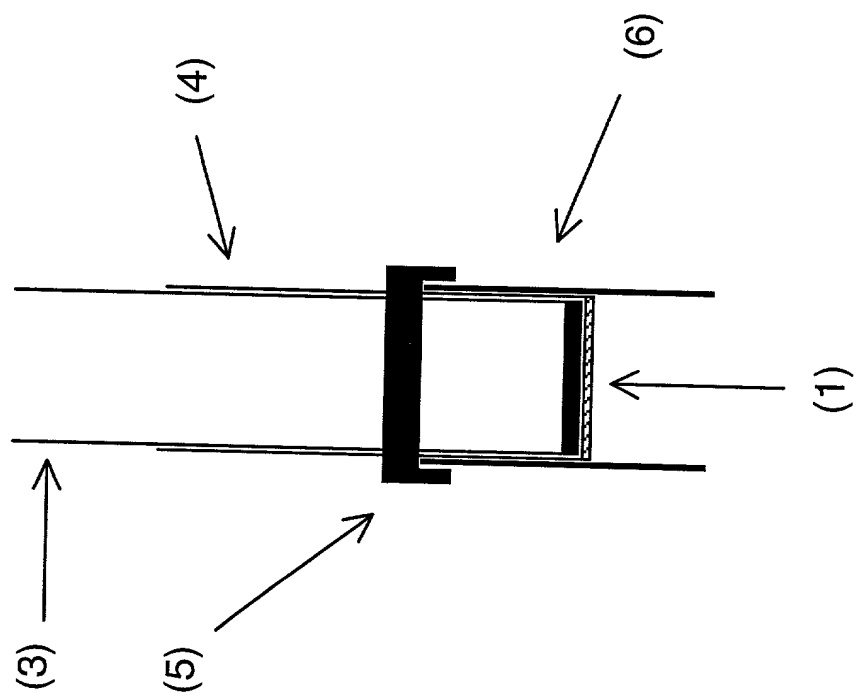


FIG. 5 is a cross-sectional view of the device of FIG. 1, showing the device in a closed position. The device is shown in a cross-sectional view, with the upper portion of the device being a cylindrical shell, and the lower portion being a conical shell. The device is shown in a closed position, with the conical shell being retracted into the cylindrical shell. The device is shown in a cross-sectional view, with the upper portion of the device being a cylindrical shell, and the lower portion being a conical shell. The device is shown in a closed position, with the conical shell being retracted into the cylindrical shell.

Figure 5

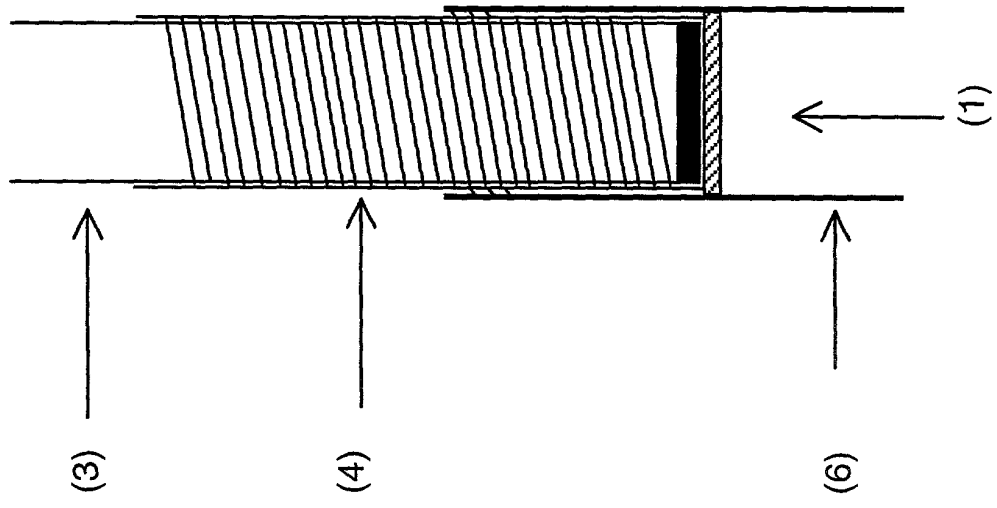
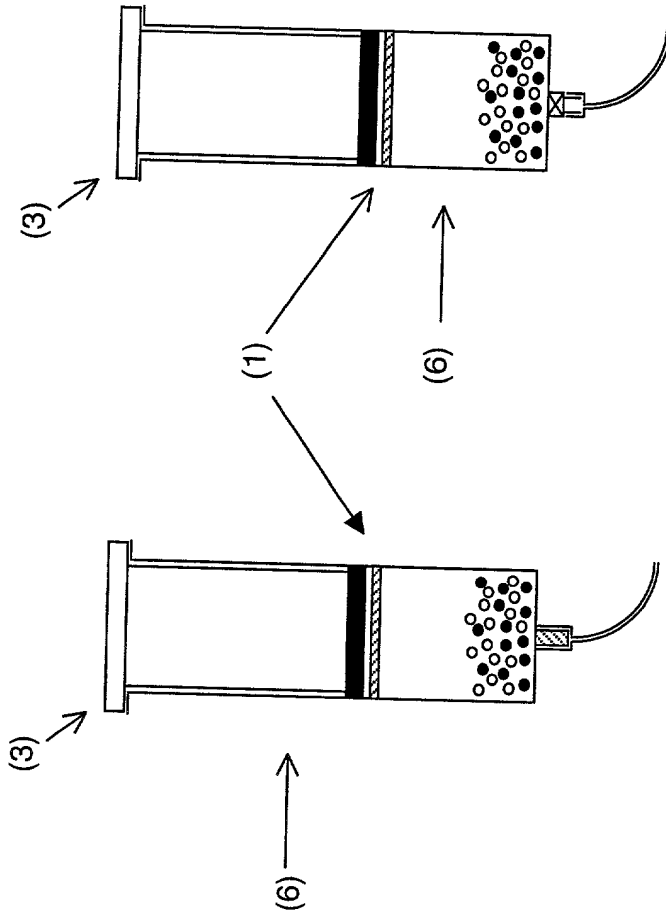
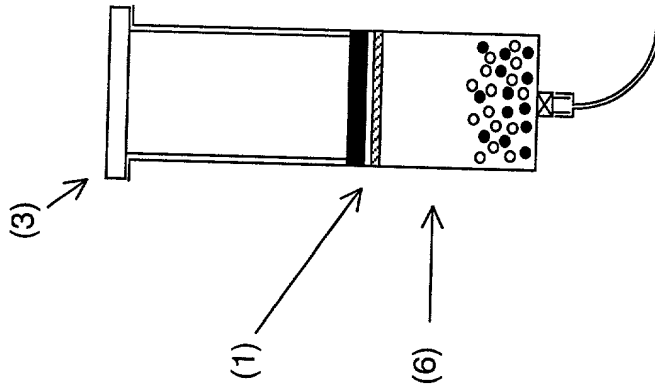


Figure 6

6A



6B



6C

